Application Serial No. 10/648,012
Response to Office Action of March 30, 2007
Attorney Docket No. W003-4000

AMENDMENT TO CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application. Six new claims, 54-59 have been added.

Listing of Claims:

Claims 1 - 18 (canceled).

19. (Currently Amended) A wireless digital audio system, comprising:

at least one audio source to produce an audio output representative of music;

at least one digital audio transmitter operatively coupled to said at least one audio source, said at least one audio transmitter comprising:

a first analog low pass filter receiving the audio output from said at least one audio source;

a digital low pass filter;

an analog-to-digital converter (ADC) operatively coupled between said first analog and digital low pass filters;

a first encoder receiving output from said digital low pass filter and being configured to reduce intersymbol interference (ISI);

a second channel encoder operatively coupled to said first encoder and adapted to reduce transmission errors;

a digital modulator operatively coupled to said second channel encoder; and

a differential phase shift key (DPSK) module receiving output from said digital modulator and a unique user code bit sequence and being configured for direct sequence spread spectrum (DSSS) communication, said DPSK module transmitting a corresponding DSSS signal having said audio output representative of the music and the unique user code bit sequence;

at least one audio receiver configured for digital wireless communication with said at least one audio transmitter and utilizing embedded fuzzy logic to optimize digital signal processing, said at least one audio receiver comprising:

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